

Date: Thursday, 27/11/2008 3:06:03 PM
 User: Linda Lacelle

ASAP Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : STEM
 Job Number : 43834 -3
 Estimate Number : 10857
 P.O. Number :
 This Issue : 27/11/2008 S.O. No. :
 Prsht Rev. : NC Part Number : D34077
 Drawing Number : D3407 REV E
 Project Number : N/A
 Drawing Revision :
 Material :
 Due Date : 04/12/2008 Qty: 10 Um: Each
 First Issue : / / Type : MACHINED PARTS
 Previous Run : 42439
 Written By :
 Checked & Approved By :
 Comment : Est Rev:A 05-10-18 New issue KJ/EC
 Est Rev:B Now on Doosan 08-05-14 JLM Verified By:DD
 Est Rev:C 08-08-12 revE as per dwg (ecn 08-507) DD verified by:EC

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M174R0750 17-4 round bar .750



Comment: Qty.: 0.3843 f(s)/Unit Total: 3.8430 f(s)
 Material: 17-4ph SS Round Bar Ø0.750(M17-4-R0.750)
 Identify for D3407-7
 Batch: M109475 SA 08/12/03

2.0 DOOSAN LATHE DOOSAN LATHE



Comment: DOOSAN CNC LATHE

1-Turn as per Folio FA N/A Rev: N/A & Dwg D3407 Rev: E

2-Deburr

SA 08/12/03

(18)

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SA 08/12/03

(18)

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

SA 08-12-08

(18)

5.0 PACKAGING 1 PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: weldy

u 08.12.08

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 27/11/2008 3:06:03 PM
User: Linda Lacelle

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEM

Job Number: 43834

Part Number: D34077

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

08/12/08 HJ

Job Completion



MF 08-12-08

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 43834
Description: Stem		Part Number: 3407-7
Inspection Dwg:	Rev: E	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

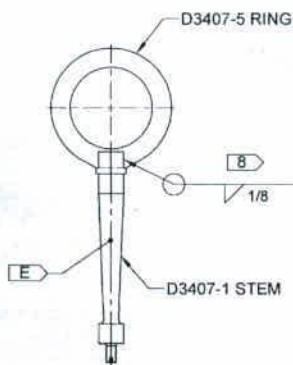
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
.063	$\pm .010$	.063	/			
1/4-28 UNF	Max. .2665 Min. .2635	.2655	/			
Major Ø	Max. .249 Min. .2425	.246	/			
Ø .625	$\pm .006$ $\pm .010$	.626	/			
Ø .750	$\pm .006$ $\pm .010$	.751	/			
.150	$\pm .010$	.150	/			
.550	$\pm .010$	.551	/			
.500	$\pm .010$	.500	/			
3.500	$\pm .010$	3.500	/			
4.500	$\pm .000$ $\pm .010$	4.500	/			
5.400	$\pm .010$	5.400	/			
.500	$\pm .000$ $\pm .010$	.495	/			
.350	$\pm .010$	.351	/			
.625	$\pm .010$	.626	/			
.250	$\pm .010$ $\pm .000$	.252	/			

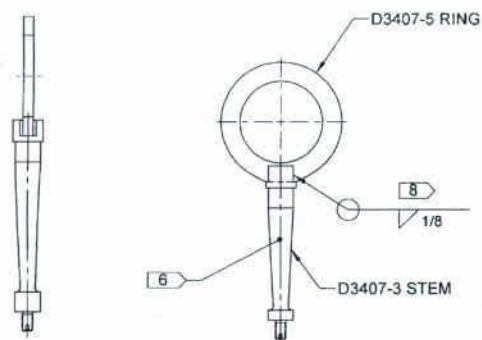
Measured by: SA	Audited by: [Signature]	Prototype Approval:	N/A
Date: 08/12/03	Date: 08-12-08	Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New Issue	KJ/JLM	

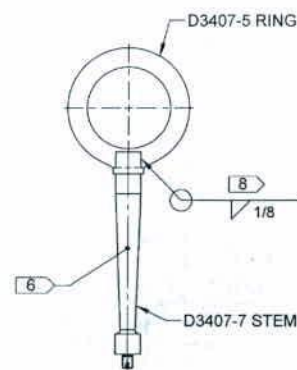
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



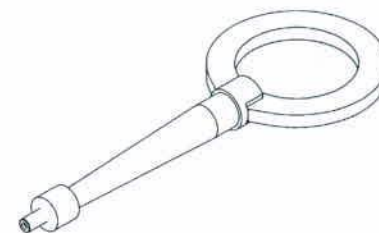
D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING



RELEASED

Wb 43834

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

REV.	DESCRIPTION	BY	DATE
E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 6 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.06.17
A	NEW ISSUE	CP	05.03.16
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.23		

DART AEROSPACE USA, INC.
PORT HADLOCK, WA

DRAWING NO. **D3407** REV. E
TITLE **TOW RING** SCALE NTS
SHEET 1 OF 5

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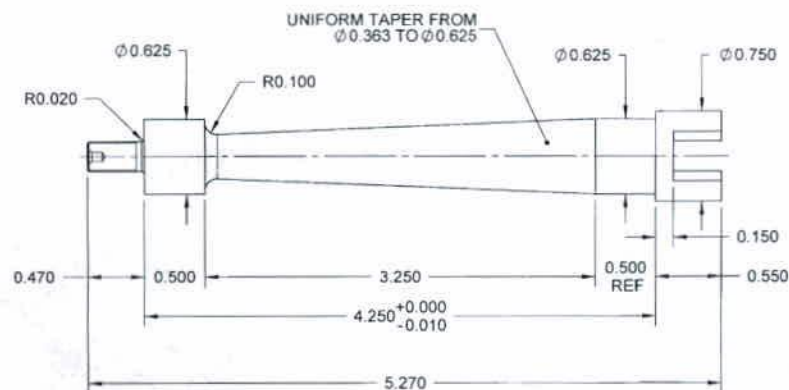
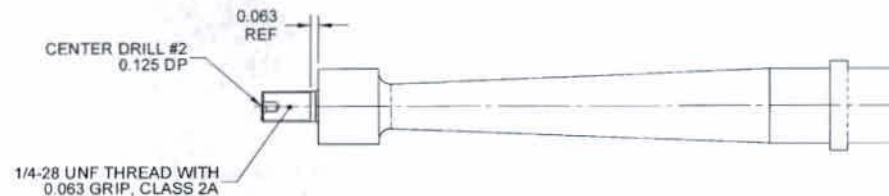
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

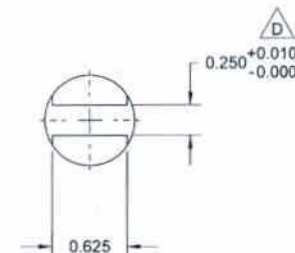
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



D3407-1 STEM

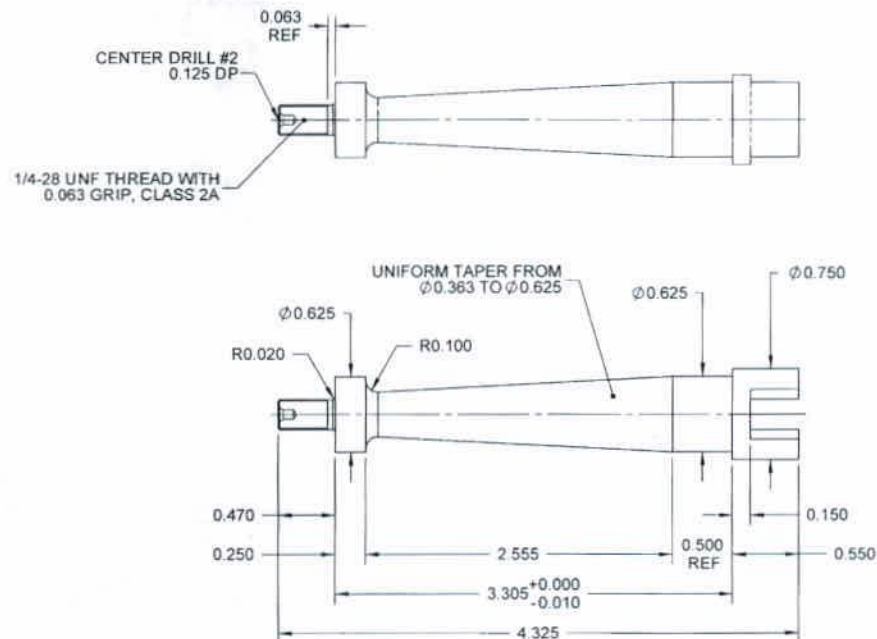


NOTES:

- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.33 lbs

RELEASED

DESIGN		DART AEROSPACE USA, INC.	
DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO	REV. E
MFG APPR		D3407	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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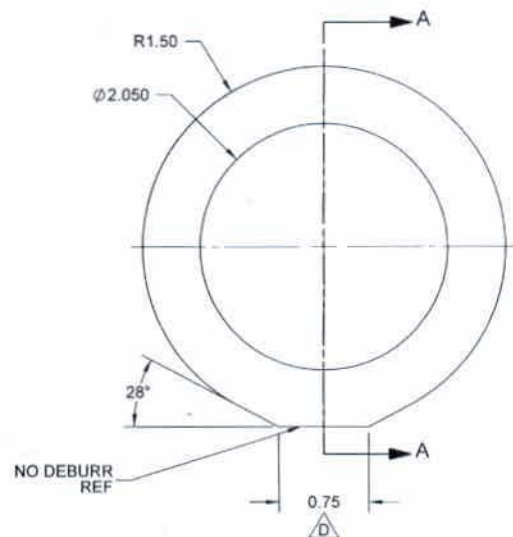
D3407-3 STEM

NOTES:

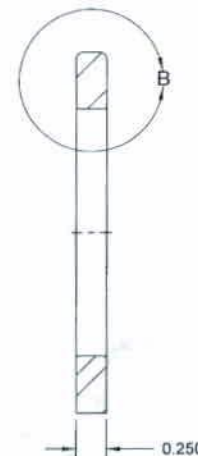
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.27 lbs

RELEASED
04-03-01-114

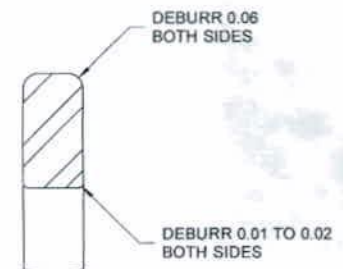
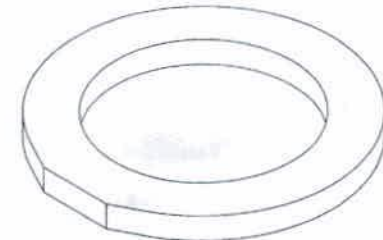
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DRAWN		PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 3 OF 5
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D3407-5 RING



SECTION A-A



**DETAIL B
SCALE 2X**

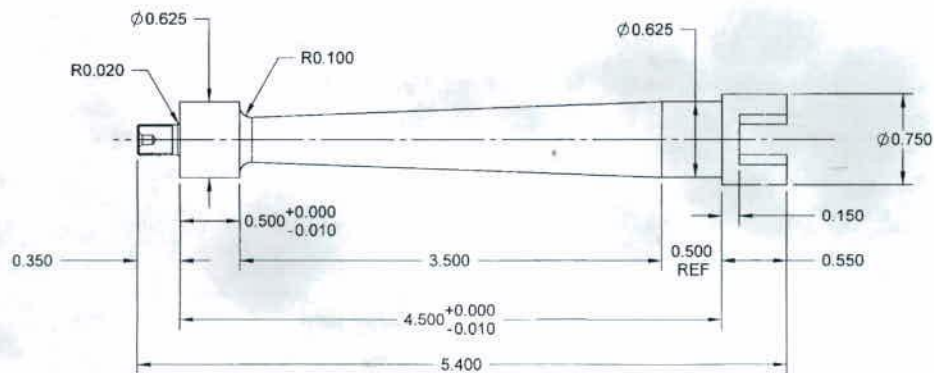
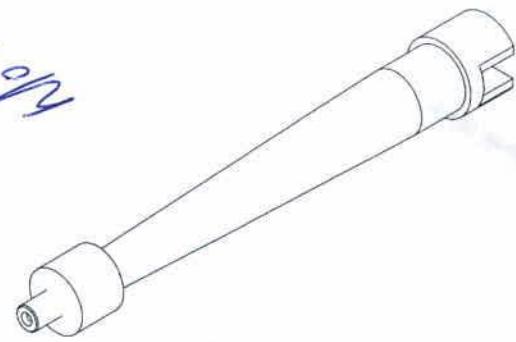
RELEASED
06-06-01A

- NOTES:**
- 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.27 lbs

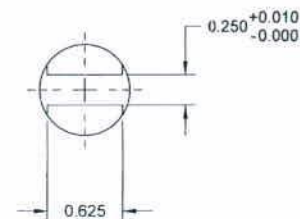
43834

DESIGN	90	DART AEROSPACE USA, INC.	
DRAWN	Per	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3407	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		TOW RING	NTS
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Handwritten: #3837



D3407-7 STEM



- NOTES:
 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 6) IDENTIFICATION: N/A
 7) WEIGHT: 0.34 lbs

RELEASED

DESIGN	AJS	DART AEROSPACE USA, INC.	
DRAWN	<i>[Signature]</i>	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO. D3407	REV. E
MFG. APPR.	<i>[Signature]</i>	TITLE TOW RING	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>		SCALE NTS
DE APPR.	<i>[Signature]</i>		
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